## REMARKS

The Applicant thanks the Examiner for the thorough consideration given the present application. Claims 1-16 are currently being prosecuted. The Examiner is respectfully requested to reconsider his rejections in view of the Amendments and Remarks as set forth below.

## REJECTION UNDER 35 U.S.C.§112

Claim 1-11 stand rejected under 35 U.S.C.§112 second paragraph as being indefinite. The Examiner objects to the language describing the number of cams and pressure glides. By way of the present Amendment, the Applicant has modified the language to utilize "at least" in each situation. However, the Applicant submits this should not be necessary. Thus, although at least one cam is recited, this means it could be one or more than one. In the figures, each cam is associated with two pressure glides. However, each cam could have one pressure glide or more than two. When claim 1 first describes at least one cam, then refers to each cam, however this is appropriate since the number of cams may be two or more or could be only one. In either case each is appropriate. However, since the claims have now been amended, the Applicant submits that the indefiniteness is removed.

In reviewing the claims, the Applicant has also changed the word "camshaft" in claims 4 and 6 to "shaft" to provide proper antecedent basis.

## REJECTION UNDER 35 U.S.C.§102

Claim 1, 2, 4, 7 and 8 stand rejected under 35 U.S.C. §102 as anticipated by Dingess (U.S. Patent 4,854,274). This rejection is respectfully traversed.

The Examiner states that the Dingess reference shows a camshaft 15, at least one pressure glide 17, inflatable bladder 23 where the pressure glide is pushed backwardly by the cam as it turns, causing the cam to be slowed. The Applicant disagrees that the present claims are either anticipated by or obvious over this reference.

The Dingess reference is used in conjunction with an internal combustion engine to obtain higher speeds. The flywheel shown in figure 2 has cams 15 mounted on crank shaft 10. The cams apply pressure to a nitrogen filled bladder 23 through cam action rods 20. This arrangement is used because the power strokes of the engine are not arranged evenly as in a conventional engine. Instead, two or more cylinders are designed to provide power at one time so that higher speeds are obtained. The cam arrangement in the flywheel is used to take advantage of the uneven power strokes. The flywheel is arranged to change the advance angle during different parts of the power cycle. It should be noted that the nitrogen filled bladders and spring arrangement are not used to brake the device, but only to control the movement of the cam action rods. Thus, this arrangement does not act to slow the cam shaft or slow the vehicle.

Claim 1 has been amended to make more clear the use of the device. Claim 1 has already been described as a brake assembly which is not shown in Dingess. The preamble has now been amended to make it clear that this is a brake assembly for braking a vehicle,

which is even more clearly not shown in Dingess. The shaft has been amended to make it clear that it is connected to the wheels and the final paragraph now makes it clear that this action causes braking on the vehicle. This arrangement of the assembly is not taught or obvious over Dingess. As stated above, the Dingess device is only used to control the power output of the internal combustion engine and not used for braking a vehicle. Although, there are some similarities in the use of the cam and bladders, the present invention is arranged differently within the vehicle and is used for a different purpose. These are now specifically described in claim 1 and thus this claim is allowable over Dingess.

As described in the specification, the present invention is designed to provide a brake, either in conjunction with standard brakes or as the primary braking system for the vehicle. Especially in the environment of a large truck, adequate braking is always a problem. The present invention provides additional braking which can be used to help brake a heavy loaded large vehicle, or maybe used even as the primary brake for a vehicle of this type. The bladder arrangement forces the pressure glides against the cam to slow the shaft and thus brake the vehicle. This arrangement is clearly different from the device shown in Dingess which is only used to allow higher speeds from the power stroke of the engine.

Further, as is shown in Figure 4 of the application, the cams have a long inclined surface so that the cams overlap. This allows more than one pressure glide to be actuated at a time and causes the braking effect to be applied evenly and continuously. Thus, even

when one cam reaches the lobe and releases the pressure glide, other cams will already be actuating their pressure glides. Thus, the braking effect is both continuous and even.

Claims 2-11 and 14 depend from claim 1 and as such are also considered to be allowable. In addition, each of these claims recites other features which makes the additionally allowable. Claims 2, 3 and 14 relate to the compressing spring arrangements. In the present invention, the two springs are mounted on the same axis with the small spring being contained within the first but extending a larger distance. The outer spring transmits force between the bladder section and the pressure glide as part of mechanism for providing braking. The inner spring is not as strong, but is used to gently hold the pressure glides against the cams, even when the braking action does not occur, in order to reduce the amount of noise caused by the pressure glides when unaccuated. Claim 14 also now makes it clear that the second springs are longer than the first springs. Claims 4-6 and 9-11 relate to the arrangement of this assembly to the vehicle. Claims 7 and 8 further describe the apparatus and especially the glide keepers and the number of pressure glides for each cam. New claims 15-16 now describe the overlapping of the cams so that the braking is even and continuous. This feature is not shown in the reference. According, these claims are additionally allowable.

**REJECTION UNDER 35 U.S.C.§103**

Claims 5 and 9-12 stand rejected under 35 U.S.C.§103 as obvious over Dingess. The Applicant submits that claims 5 and 9-11 are allowable based on their dependency from allowable claim 1 as indicated above. Claim 12 is a method claim which corresponds

to claim 1. This claim also makes it clear that the operation causes braking of a vehicle and also indicates that the bladder is inflated in response to the activation of a brake petal. Since the Dingess reference is not used to provide braking for a vehicle and does not slow the cam or the shaft and does not inflate the bladder in response to the activation of a brake petal, the Applicant submits that this claim is likewise allowable.

The Examiner rejected claims 3 and 13 as being obvious over Dingess in view of Ortega. The Examiner cited the Ortega reference to show the use of nested springs. However, the Applicant submits that Ortega does not show the spring arrangement as presently claimed. In the present invention, the smaller spring extends beyond the outer spring in order to hold the pressure glide from rattling when not in use. Ortega does not show the longer internal spring and are not used in a similar arrangement. Accordingly, the Applicant submits that claims 3 and 13 are additionally allowable.

The Examiner rejected claim 6 as being obvious over Dingess in view of Muscatell (U.S. Patent 5,465,817). This rejection is respectfully traversed.

The Examiner cited Muscatell to show use of a brake pedal to apply hydraulic pressure to the braking system. The Applicant submits that even if this reference does show this feature, it does not aid Dingess in overcoming its deficiencies as noted above. Accordingly, the Applicant submits that this claim is likewise allowable.

## CONCLUSION

In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination. In view of this, reconsideration of the rejection and allowance of all the claims are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert F. Gnuse (Reg. No. 27,295) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By _____ #28380
for Joe McKinney Muncy, #32,334

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

KM/RFG/te
4425-0103P